

Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Err ors
1 BRS	L1	77468	thickener or thickening	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:19			0
2 BRS	L2	9149	associative	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:19			0
3 BRS	L3	210577	pigment	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:19			0
4 BRS	L4	447899	ph	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:19			0
5 BRS	L5	260412	ink	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:20			0
6 BRS	L6	243037	writing or pen	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:20			0
7 BRS	L7	405	2 adj 1	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:20			0
8 BRS	L8	611	1 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:21			0
9 BRS	L10	4	(7 AND 6 AND 5)	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:23			0

Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
10	BRS	L12	45	7 and 3 and 4 and 5	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 13:24		0
11	BRS	L14	150	1 and 3 and 4 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:11		0
12	BRS	L15	2315368	treat\$4 or modify\$3 or modified	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:08		0
13	BRS	L16	9439	15 near 5 3	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:09		0
14	BRS	L17	40636	"polar solvent"	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:09		0
15	BRS	L18	566863	alkali or alkaline	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:10		0
16	BRS	L20	3	16 and 17 and 4 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:12		0
17	BRS	L23	26	21 and (1 or 7)	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:13		0
18	BRS	L24	251	16 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:28		0

Type	L #	Hits	Search Text	DBS	Time Stamp	Comments	Error Definition	Err ors
19	BRS	L25	1634 18 near5 1	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:28			0
20	BRS	L27	180 4 adj2 1	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:29			0
21	BRS	L29	13 25 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:29			0
22	BRS	L30	5 27 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:30			0

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UserID: CShosho

Computer: WS05551

Date: 02/24/2000

Time: 14:40

## Document Listing

Document	Image pages	Text pages	Error pages
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JP 06346014 A	0	1	0
Total	0	1	0

Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Err ors
23	BRS	L31	23	3 and 4 and 5 and (26 or 27)	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:32		0
24	BRS	L33	87	((25 OR 27) AND 3 AND 5 AND 4)	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:43		0
25	BRS	L35	11	1 and 3 and 4 and 5 and 6 and 17	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:37		0
26	BRS	L36	838	primal	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:44		0
27	BRS	L38	24	36 and 5 and 6	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:45		0
28	BRS	L40	96	36 and 5	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:48		0
29	BRS	L42	35	40 and 3 and 4	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:46		0
30	BRS	L44	61	40 not 42	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:49		0
31	BRS	L45	2132	7 or 25 or 27	USPAT; USOCR; EPO; JPO; Derwent	2000/02/24 14:49		0

Type	L #	Hits	Search Text	DBS	Time Stamp	Comments	Error Definition	Errors
36	BRS	L54	3 "polyphobe 9823"	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 14:51			0
37	BRS	L59	375132 (ACRYLIC OR POLYMETHACRYLIC OR POLYACRYLIC OR METHACRYLIC OR HYDROPHOBIC)	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 14:53			0
38	BRS	L60	432 59 same (7 or 25 or 27)	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 14:54			0
39	BRS	L62	9 60 and 5 and 6	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 14:55			0
40	BRS	L63	7315 1 same 59	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 14:55			0
41	BRS	L66	81 63 and 5 and 6	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 15:01			0
42	BRS	L67	93792 swell\$3	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 15:01			0
43	BRS	L68	479 1 near5 67	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 15:02			0
44	BRS	L70	3 68 and 5 and 6	USPAT; USOCCR; EPO; JPO; Derwent	2000/02/24 15:02			0

DERWENT-ACC-NO: 1995-070504

DERWENT-WEEK: 199510

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TITLE: Aq. ball point pen ink compsn. providing good ink flow - comprises e.g.

pigment dispersions, ethylene glycol, acrylic! emulsions and opt. sodium hydroxide

PATENT-ASSIGNEE: MIKUNI SHIKISO KK[MIKUN]

PRIORITY-DATA: 1993JP-0134888 (June 4, 1993)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
JP 06346014 A 011/18	December 20, 1994	N/A	008 C09D

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP06346014A	N/A	1993JP-0134888	June 4, 1993

INT-CL (IPC): C09D011/18

ABSTRACTED-PUB-NO: JP06346014A

BASIC-ABSTRACT: Ink compsn. consists of pigment component (A); glycol-type organic solvent (B); alkali thickening emulsion (C) and alkaline component (D).

Also claimed is an aq. ball point pen ink compsn. consisting of alkaline pigment compsn. (A'), (B), (C) and opt. (D).

Examples of (C) are acrylic, styrene/acrylic and polybutadiene type O/W emulsions which contain carboxylic gps. and thicken with alkali. Examples of (D) are NaOH, KOH, Na<sub>2</sub>CO<sub>3</sub>, NaHCO<sub>3</sub>, Na acetate, KH<sub>2</sub>PO<sub>4</sub>, ammonia, aminoalcohols,

morpholine and aliphatic amines. Examples of (A) and (A') are dispersions of pigments stabilised with polymer dispersant, opt. contg. alkaline cpd. for solubilising polymer dispersant. A suitable amt. of (A) or (A') is 30-70 (35-65, 40-60) pts. wt. Examples of (B) are ethylene glycol, diethylene glycol, glycerine, diglycerine, PG, DEG, PEG, 1,3-butylene glycol, thioglycol, hexylene glycol. Suitable addn. amt. of (C) is such an amt. that

the ink compsn. thickens to 200-5000 (300-4000, 500-3500) mPa.s with (D) and generally 0.01-10.0 (0.05-5.0, 0.1-3.0) pts. wt. in 100 pts. wt. of the ink

compsn. Suitable addn. amt. of (D) is such that pH value of ink becomes higher than 8 (9), pref. between 9.5-10.5.

ADVANTAGE - Ball point pens filled with aq. ball point pen compsn. exhibits good ink flowability at pen tips without causing dripping of ink and therefore

good writing properties.

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: A84 G02

CPI-CODES: A12-D05B; G02-A04A;

DERWENT-ACC-NO: 1995-161766

DERWENT-WEEK: 199950

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TITLE: Ink compsn. for ball point pens with good writing characteristics -

contains film-forming polymer, pigment, thickener, water and oil

INVENTOR: LOFTIN, R M

PATENT-ASSIGNEE: GILLETTE CO[GILL]

PRIORITY-DATA: 1993US-0137841 (October 15, 1993) , 1995US-0449716 (May 24, 1995) , 1996US-0710642 (September 18, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
MAIN-IPC			
US 5969004 A	October 19, 1999	N/A	000 C09D
011/10			
WO 9510571 A1	April 20, 1995	E	014 C09D
011/18			
AU 9479802 A	May 4, 1995	N/A	000 C09D
011/18			
ZA 9407977 A	August 30, 1995	N/A	016 C09D
000/00			
EP 723569 A1	July 31, 1996	E	000 C09D
011/18			
BR 9407807 A	May 6, 1997	N/A	000 C09D
011/18			
JP 09503816 W	April 15, 1997	N/A	014 C09D
011/06			
CN 1133057 A	October 9, 1996	N/A	000 C09D
011/18			
TW 321679 A	December 1, 1997	N/A	000 C09D
011/16			
EP 723569 A4	October 22, 1997	N/A	000 C09D
011/18			
AU 696102 B	September 3, 1998	N/A	000 C09D
011/18			
SG 64353 A1	April 27, 1999	N/A	000 C09D
011/18			
US 5951188 A	September 14, 1999	N/A	000 B43K
007/01			

DESIGNATED-STATES: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP

K

E KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ

TT

UA US UZ VN AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ AT

BE

CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

CITED-DOCUMENTS: US 4410643; US 4960464 ; US 4981517 ; US 5004763 ; US 5120359

; No-Citns.

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 5969004A 1993	N/A	1993US-0137841	October 15,
WO 9510571A1 1994	N/A	1994WO-US11710	October 13,
AU 9479802A 1994	N/A	1994AU-0079802	October 13,
AU 9479802A	Based on	WO 9510571	N/A
ZA 9407977A	N/A	1994ZA-0007977	October 12,

1994				
EP 723569A1	N/A	1994EP-0930782	October 13,	
1994				
EP 723569A1	N/A	1994WO-US11710	October 13,	
1994				
EP 723569A1	Based on	WO 9510571	N/A	
BR 9407807A	N/A	1994BR-0007807	October 13,	
1994				
BR 9407807A	N/A	1994WO-US11710	October 13,	
1994				
BR 9407807A	Based on	WO 9510571	N/A	
JP 09503816W	N/A	1994WO-US11710	October 13,	
1994				
JP 09503816W	N/A	1995JP-0512092	October 13,	
1994				
JP 09503816W	Based on	WO 9510571	N/A	
CN 1133057A	N/A	1994CN-0193778	October 13,	
1994				
TW 321679A	N/A	1994TW-0110083	November 2,	
1994				
EP 723569A4	N/A	1994EP-0930782	October 13,	
1994				
AU 696102B	N/A	1994AU-0079802	October 13,	
1994				
AU 696102B	Previous Publ.	AU 9479802	N/A	
AU 696102B	Based on	WO 9510571	N/A	
SG 64353A1	N/A	1996SG-0007080	October 13,	
1994				
US 5951188A	Div ex	1993US-0137841	October 15,	
1993				
US 5951188A	Cont of	1995US-0449716	May 24, 1995	
US 5951188A	N/A	1996US-0710642	September	
18, 1996				

INT-CL (IPC): B43K007/01; C08L091/02 ; C09D000/00 ; C09D011/06 ;  
C09D011/10 ; C09D011/16 ; C09D011/18

ABSTRACTED-PUB-NO: US 5951188A

BASIC-ABSTRACT: Prepn. of an ink compsn. comprises (1) mixing a film forming polymer, a pigment, water and an oil to form an ink precursor, and (2) processing the ink precursor in a homogeniser to form a microemulsion. Also claimed is (a) the same prepn. to form an ink contg. a pH dependent thickener, a base, a pigment, water and an oil and (b) the prepn. comprising the steps (1) mixing an oil and water to form a mixt., (2) processing the mixt. in a homogeniser to form an oil-in-water emulsion, and (3) blending the emulsion with a pH dependent thickener, a base, a pigment and water.

USE - The ink is used in pens (claimed) esp. ball point pens . The ink has good permanency, long cp-off times, high writing intensity, smooth writing characteristics, consistent ink flow and long shelf life.

ABSTRACTED-PUB-NO: US 5969004A

EQUIVALENT-ABSTRACTS: Prepn. of an ink compsn. comprises (1) mixing a film forming polymer, a pigment, water and an oil to form an ink precursor, and (2) processing the ink precursor in a homogeniser to form a microemulsion. Also claimed is (a) the same prepn. to form an ink contg. a pH dependent

thickener,  
a base, a pigment, water and an oil and (b) the prepn. comprising the steps  
(1)  
mixing an oil and water to form a mixt., (2) processing the mixt. in a  
homogeniser to form an oil-in-water emulsion, and (3) blending the emulsion  
with a pH dependent thickener, a base, a pigment and water.

USE - The ink is used in pens (claimed) esp. ball point pens.. The ink has  
good  
permanency, long cp-off times, high writing intensity, smooth writing  
characteristics, consistent ink flow and long shelf life.

Prepn. of an ink compsn. comprises (1) mixing a film forming polymer, a  
pigment, water and an oil to form an ink precursor, and (2) processing the  
ink  
precursor in a homogeniser to form a microemulsion. Also claimed is (a) the  
same prepn. to form an ink contg. a pH dependent thickener, a base, a  
pigment,  
water and an oil and (b) the prepn. comprising the steps (1) mixing an oil and  
water to form a mixt., (2) processing the mixt. in a homogeniser to form an  
oil-in-water emulsion, and (3) blending the emulsion with a pH dependent  
thickener, a base, a pigment and water.

USE - The ink is used in pens (claimed) esp. ball point pens . The ink has  
good  
permanency, long cp-off times, high writing intensity, smooth writing  
characteristics, consistent ink flow and long shelf life.

WO 9510571A

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: A97 G02 P77

CPI-CODES: A12-D05B; G02-A04A;

DERWENT-ACC-NO: 1984-097014

DERWENT-WEEK: 198416

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TITLE: Ink compsn. for writing instruments or stamps - comprises pigment, alcohol solvent, alcohol-soluble resin and hydroxyalkyl pyridine deriv

PATENT-ASSIGNEE: SAKURA CRAPAS KK[SAKC]

PRIORITY-DATA: 1982JP-0152451 (August 31, 1982)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
JP 59041369 A	March 7, 1984	N/A	003 N/A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP59041369A	N/A	1982JP-0152451	August 31, 1982

INT-CL\_(IPC): C09D011/00

ABSTRACTED-PUB-NO: JP59041369A

BASIC-ABSTRACT: Ink ccompsn. (I) consists of a colouring matter (II), an alcohol solvent (III), an alcohol-soluble resin (IV) and a hydroxyalkylpyridine deriv.

of formula (V). In (V), R is H or 1-4C alkyl and n is 1-4.

(II) is e.g. an alcohol-soluble dye such as C.I. Solvent Yellow 1, 3, 13 or 34

on an alcohol-soluble resin-treated pigment e.g. 'Fuji AS Colour' (RTM).

(III)

is e.g. methanol, ethanol, ethylene glycol monoethyl ether or ethylene glycol monobutyl ether. (IV) is pref. e.g. phenol resin, ketone resin or rosin (deriv.) (V) is e.g. propanolpyridine, ethanolpyridine or pyridinecarbitol.

(I) produce no whitening due to deposition of resinous component or blinding within a pen point. It is suitable for use in writing tools (e.g. marking pens ) or stamps.

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: A97 E19 G02

CPI-CODES: A12-D05; A12-W07D; E07-D04; G02-A04A;

DERWENT-ACC-NO: 1984-278386

DERWENT-WEEK: 198445

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TITLE: Writing pen ink compsn. - includes titanium white surface-treated with

methyl hydrogen polysiloxane

PATENT-ASSIGNEE: DAITO KASEI KOGYO KK[DAIT], SEIKO SEISAKUSHO KKK[SEIKN]

PRIORITY-DATA: 1983JP-0044658 (March 16, 1983)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
MAIN-IPC			
JP 59170166 A	September 26, 1984	N/A	005 N/A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP59170166A	N/A	1983JP-0044658	March 16, 1983

INT-CL (IPC): C09D011/16

ABSTRACTED-PUB-NO: JP59170166A

BASIC-ABSTRACT: The ink is obtd. by homogeneously mixing an organic solvent and

a pigment which has been previously surface-treated with a methyl hydrogen polysiloxane.

USE/ADVANTAGE - Since the ink pigment has excellent affinity and dispersibility

with the organic solvent, the ink causes less pigment sedimentation and is provided with rapid restoration and flowability, after 30 days, giving fresh colour and no colour unevenness.

In an example, the ink compsn. comprised (in pts. wt.): surface-treated rutile-type titanium white 100.0; methyl hydrogen polysiloxane 2.0; trichloroethylene 100.0; and dibutyl tin diuralate (sic) 0.2. The compsn. was

homogeneously mixed for about one hour, wind-dried to blow off trichloroethylene, and then put into a dryer and heated for about one hr. at about 100 deg. C.

CHOSEN-DRAWING: Dwg. 0/0

DERWENT-CLASS: A97 G02

CPI-CODES: A06-A00E; A12-D05; G02-A04A; G02-A04B;

DERWENT-ACC-NO: 1994-132220

DERWENT-WEEK: 199416

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TITLE: Recording material for ball point pens - contains pigment modified by fluorine contg. gas

PATENT-ASSIGNEE: MITSUBISHI PENCIL CO LTD[MISP]

PRIORITY-DATA: 1992JP-0253451 (August 31, 1992)

PATENT-FAMILY:

PUB-NO MAIN-IPC	PUB-DATE	LANGUAGE	PAGES
JP 06080924 A 011/16	March 22, 1994	N/A	006 C09D

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP06080924A	N/A	1992JP-0253451	August 31, 1992

INT-CL\_(IPC): C08K009/02; C09B067/08 ; C09C003/00 ; C09D011/16 ; G03G009/12

ABSTRACTED-PUB-NO: JP06080924A

BASIC-ABSTRACT: Recording material contains pigment (A) surface-treated pref.

at (-)80-(+)50 deg.C with fluorine contg. gas. An ink compsn. contg. (A), solvent (B) and binder resin (C) is also new.

Pref. (A) is obtd. by surface treating organic and/or inorganic pigment for 0.5-60 min. with fluorine gas or a mixt. of fluorine gas and inert gas of 1-760

mmHg. (B) is mixts. of water and water-soluble organic solvent(s) selected from polyhydric alcohols like EG and glycerin, glycol ethers like monoethyl ether of EG or DEG and glycol ether esters like monoethyl ether acetate. (C) may be selected from the gps. of water-soluble resins like water-soluble acrylic, styrene/acryl, styrene/maleic acid copolymers and water-dispersible resins like emulsions of vinyl acetate and acrylic acid copolymers. A suitable

(A)/(B)/(C) wt.% ratio is 3-30/40-80/1-20. This recording material may contain

additionally a lubricant, a pH adjuster, a rust preventive and other conventional additive(s).

USE/ADVANTAGE - The recording material is suitable as an ink compsn. for ballpoint and sign pens . Even when stored for a long period, it scarcely caused agglomeration and pptn. of pigment. Therefore, ballpoint pens and sign

pens filled with the recording material do not cause clogging of pen tips and

realise good writing properties.

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: A84 E24 G02 P84

CPI-CODES: A12-D05B; E25; E31-B03A; G02-A04A;

ERWENT-ACCC-NO: 1995-070504

DERWENT-WEEK: 199510

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TITLE: Aq. ball point pen ink compsn. providing good ink flow - comprises e.g. pigment dispersions, ethylene glycol, acrylic! emulsions and opt. sodium hydroxide

PATENT-ASSIGNEE: MIKUNI SHIKISO KK[MIKUN]

PRIORITY-DATE: 1993JP-0134888 (June 4, 1993)

PATENT-FAMILY:

PUB-NO

MAIN-IPC

JP 06346014 A

011/18

APPLICATION-DATA:

PUB-NO

JP06346014A

N/A

APPL-DESCRIPTOR

ABSTRACTED-PUB-NO: JP06346014A

BASIC-ABSTRACT: Ink compsn. consists of pigment component (A); glycol-type organic solvent (B); alkali thickening emulsion (C) and alkaline component (D).

Also claimed is an aq. ball point pen ink compsn. consisting of alkaline pigment compsn. (A'), (B), (C) and opt. (D).

Examples of (C) are acrylic, styrene/acrylic and polybutadiene type O/W emulsions which contain carboxylic gps. and thicken with alkali. Examples of (D) are NaOH, KOH, Na<sub>2</sub>CO<sub>3</sub>, NaHCO<sub>3</sub>, Na acetate, KH<sub>2</sub>PO<sub>4</sub>, ammonia, aminoalcohols, morpholine and aliphatic amines. Examples of (A) and (A') are dispersions of pigments stabilised with polymer dispersant, opt. contg. alkaline cpd. for solubilising polymer dispersant. A suitable amt. of (A) or (A') is 30-70 (35-65, 40-60) pts. wt. Examples of (B) are ethylene glycol, diethylene glycol, glycerine, diglycerine, PG, DEG, PEG, 1,3-butyleneglycol, thiobiglycol, hexylene glycol. Suitable addn. amt. of (C) is such an amt. that the ink compsn. thickens to 200-5000 (300-4000, 500-3500) mPa.s with (D) and generally 0.01-10.0 (0.05-5.0, 0.1-3.0) pts. wt. in 100 pts. wt. of the ink

compsn. Suitable addn. amt. of (D) is such that pH value of ink becomes higher than 8 (9), pref. between 9.5-10.5.

ADVANTAGE - Ball point pens filled with aq. ball point pen compsn. exhibits good ink flowability at pen tips without causing dripping of ink and therefore good writing properties.